

Research on social & environmental impact of packaging

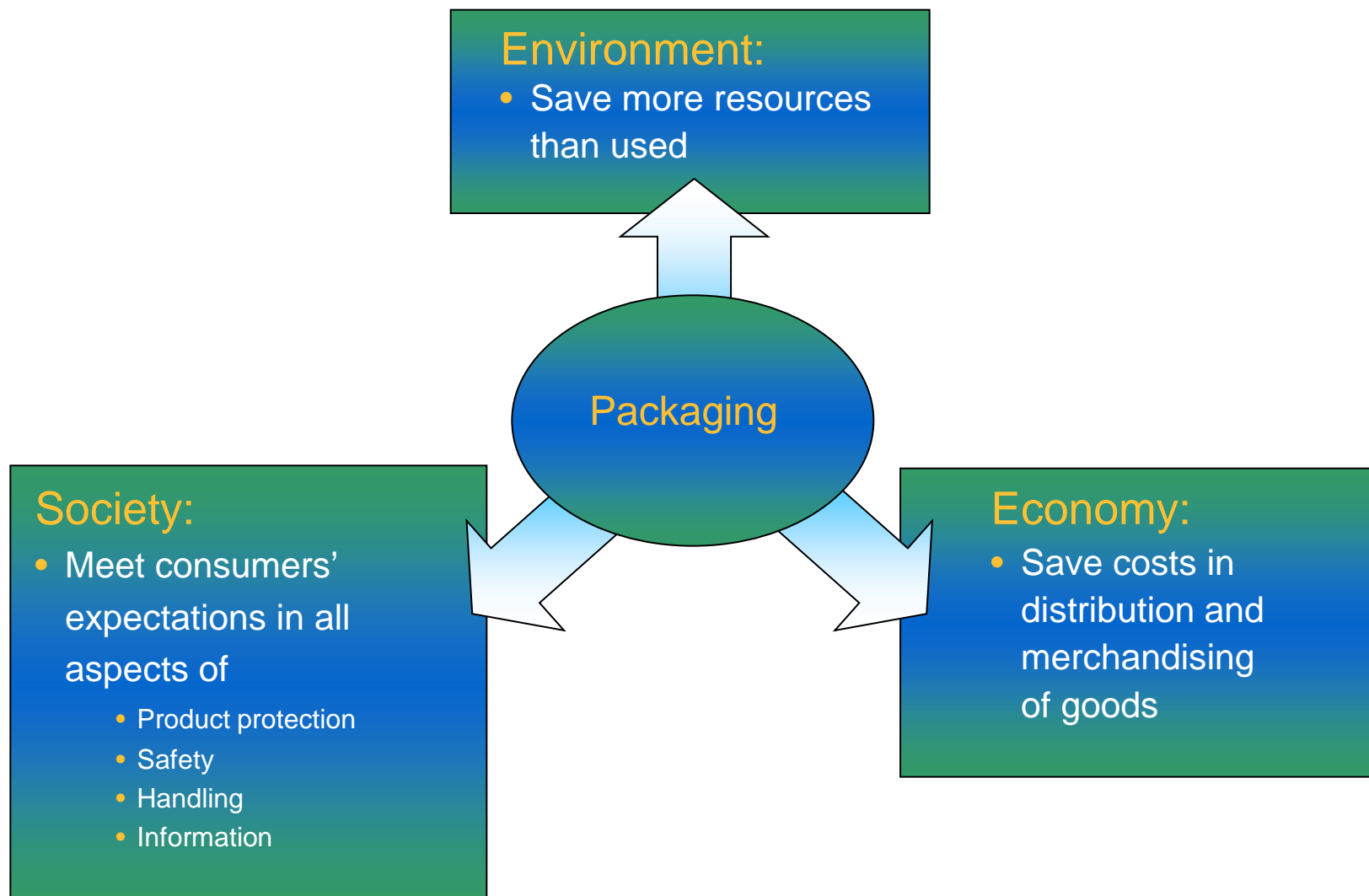
Established in 1974



Major international and British companies from every stage of the supply chain



Packaging in a sustainable society



EU policy approach to EPR



- 1980s ignored advice to focus on hazardous materials (paint, lightbulbs, batteries, varnish, electronics) in municipal solid waste - 1% by weight
- focus on more visible, benign, used packaging – 20% by weight (1985 Beverage Containers Directive, 1996 Packaging Directive)
 - no cost/benefit analysis

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- mid-2000s Shift from specific producer responsibility directives to big picture approach – Sustainable consumption and production (waste management just one part)
 - key aim to avoid shifting environmental burden from one medium to another
 - 2008 packaging targets - environmentally and economically sensible [http://eur-](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2006:0767:FIN:EN:PDF)

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EU Packaging and Packaging Waste Directive 94/62/EC



- The word 'environment' appears only in the preamble – the text refers only to 'waste'
- Primarily a Single Market directive aimed at harmonising national measures on packaging; recovery and recycling are secondary aims
- Has succeeded in raising recovery/recycling rates
- Has not succeeded in harmonising measures
 - no intention to have a uniform system because geography, economic development, infrastructure, culture all influence products & packaging, but ...
 - Commission has been very slow to tackle the trade barriers arising from Member States policy on drinks containers eg Danish 1970s can ban was not removed till 2002.

Current status



- Variety of schemes in different countries
- Green Dot system being questioned eg
 - Some German compliance schemes bankrupt
 - Increase in free-riders
 - Brands still pay same fee
 - Where's the money going?
 - Deposits superimposed on some containers – double environmental impact

Need defined objective 1



- Conserve materials and energy?
 - Buy less stuff, use stuff and services more effectively
- Reduce environmental impact of supplying goods?
 - Get supply chain to work together to design integrated sales/grouping/transport systems
- Reduce environmental impact of packaging?
 - But may have unintended consequences and increase impact
- Increase recycling of C&I and/or municipal used packaging?
 - Favouring recyclables can increase waste for final disposal and inhibit innovation in reducing packaging at the design stage

Unintended consequence of choosing recyclable containers



waste for disposal after 80% recycled

- more waste for final disposal
- 3 times more lorries needed to deliver same amount of product

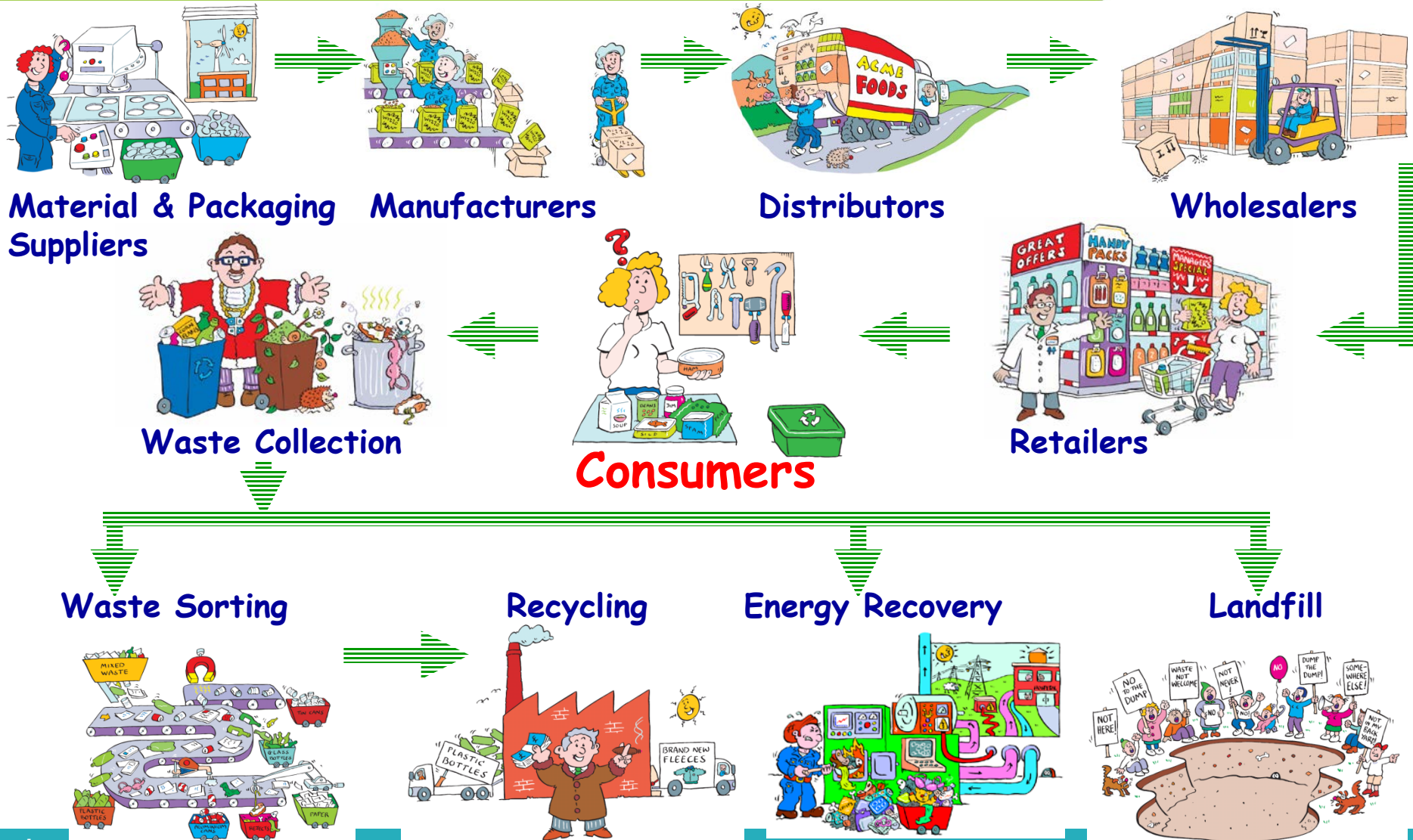
Need defined objective 2



- Raise small sum of money?
 - Voluntary agreements
- Raise large sum of money?
 - Tax

- Companies want to do the right thing, want to support reducing the environmental impact of product/packaging throughout the whole lifecycle
- Municipalities want more money
- Municipalities need to:
 - examine current processes for treatment and recovery of waste
 - define what is needed
 - identify costs
- Depending on costs – may/may not need legislation
- Work jointly to identify clear objective and how best to deliver.

The product/packaging sustainability chain



Issues and questions



- Recycling (ie collecting, sorting, cleaning) does not come for free – it has its own environmental burden
 - Commercial and Industrial used packaging - clean, homogenous quantities, recycling is often economic and environmentally viable
 - Household used packaging - contaminated, small, mixed materials arising in 125 million US households usually needs to be subsidized with additional funding;
- For net environmental benefit, how much household packaging should be recycled?
- More easily-recyclable printed paper than packaging
- EPR splits the waste stream, increases admin and operating costs. Unlikely to be the most environmentally-efficient, cost-effective way to reduce impact of waste.

Two separate issues



1. Design packaging to protect goods, perform all the functions expected of it and be capable of recovery, either as energy or as a material, after use
 - Supply chain is in control, takes responsibility, funds it and **consumers** pay in the price of goods
2. Invest in modern municipal waste management treatment facilities to reduce the environmental and public health impacts of all wastes, not just packaging.
 - Municipalities are in control, funded by public funds and **householders** pay through taxes
- Challenge is to ensure control and responsibility are linked to deliver efficient, cost-effective action.

Producer responsibility – increasing consumer costs



- Establish new national recycling organisations
- Challenges
 - Free riders
 - Monopoly effects
 - Cost control
 - Allocation principles
 - Fee structures
 - Increased bureaucracy
 - Consumer information and acceptance
- Shared Responsibility between all stakeholders - government, manufacturers, retailers, is the best solution.